

### Biodiversity and global learning

Rieckmann, Marco; Timm, Jana-M.

Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

SSG Sozialwissenschaften, USB Köln

#### Empfohlene Zitierung / Suggested Citation:

Rieckmann, M., & Timm, J.-M. (2010). Biodiversity and global learning. *Digital Development Debates*, 1(1), 1-3. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-430988>

#### Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

#### Terms of use:

This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.

By using this particular document, you accept the above-stated conditions of use.

# DIGITAL DEVELOPMENT DEBATES

Biodiversity and Global Learning

Marco Rieckmann / Jana-M. Timm, Institute for Environmental Communication at Leuphana University in Lüneburg

---

## Introduction

The United Nations declared 2010 the International Year of Biodiversity. This emphasis on the significance of biodiversity for human existence and well-being reveals just how important expanding biodiversity conservation really is. Against this background the question arises as to how much global learning can contribute to maintaining biodiversity.

## Biodiversity as a central field of action for sustainable development

Biodiversity refers to the diversity of species of plants and animals on earth and the ecosystems in which they live, along with the genetic diversity within a species. This diversity is under serious threat however: Globally around 6,000 animal species die out each year: 12% of all birds, 23% of all mammals and 32% of all fish populations are in danger of extinction (WRI 2005). This loss of biodiversity not only means that inestimable genetic resources, raw materials for medicine, and recreational areas are being lost. The population and productivity of the ecosystems is under threat, since their regulatory function is being jeopardised by the loss of species. Ecosystem services such as the filtration and purification of water, pollination of flowers, the distribution of seeds, soil formation and flood protection all make an important contribution to the basis of life and well-being of humans (WRI 2005). Their function is being disrupted by the massive drop in plant and animal species which will ultimately have socioeconomic effects. The sustainable development of the global economy therefore depends on conserving and protecting biodiversity.

## Global learning as a response to the challenges of global change

Education should provide individuals with the skills to understand global dependencies and actively participate in the sustainable formation of a global society. The educational concept of global learning strives to satisfy this ideal (cf. Asbrand/Scheunpflug 2005; Seitz 2002). According to Scheunpflug, global learning can be understood “as the pedagogical reaction to the development towards a world society” and as such “reacts to the teaching challenges resulting from the increasing globalisation of the world” (Scheunpflug 2001: 87, cf. Asbrand/Scheunpflug 2005). Its goal is to “provide learners with the skills to live in a world society”(Asbrand/Scheunpflug 2005: 469).

A variety of skill concepts are under discussion for global learning (cf. Lang-Wojtasik/Scheunpflug 2005). One of these is “creative competence”. According to de Haan et al. (2008: 188) this includes the following key skills: perspective-taking, anticipation, interdisciplinary work, dealing with incomplete and excessively complex information, cooperation, considering conflicts of aims when reflecting on strategies for action, participation, motivation, reflection of our own and foreign models, moral actions, independent planning and action, and empathy.

## Biodiversity and global learning

As a major challenge facing sustainable development today, biodiversity is well-suited as a topic for global learning. And beyond its relevance for sustainable development, it also serves as an excellent model for global dependencies and a basis for developing the different skills involved in creative competence.

By exploring biological diversity in intercultural contexts, the different meanings of the concept itself in different cultures, and connections between biological and cultural diversity can be thematised. Menzel (2010) demonstrated this quite effectively using the example of the South African devil's claw and its use in science class. This topic was well-suited, according to Menzel, to motivate pupils to gather (controversial) information independently, then work with and present it. This process also promoted the skills needed to deal with complexity.

This exploration of global dependencies and the different cultural meanings of biodiversity, as Menzel describes by example, can also lead to the development of (creative) competences such as perspective-taking, empathy and reflecting on our own and foreign models, all of which are also relevant for global learning. The interplay between environmental protection and development is also easy to see when examining the issue of biodiversity – in the so-called developing countries there is a great deal of biodiversity being endangered by socioeconomic development requirements and processes (cf. Menzel/Bögeholz 2009).

Promoting the development of skills relevant to sustainability and encouraging an awareness of the importance of biodiversity in global learning can contribute to conserving biological diversity. Individuals can cognitively explore questions concerning biodiversity conservation and participate in projects to protect it. At the same time they develop an understanding of global dependencies and have the skills to take part in a North-South dialogue on maintaining biological diversity.

In recent years, a variety of global learning projects that explored issues concerning biodiversity were carried out (cf. Lucker/Kölsch 2009; ZEP 2010). Global learning providers, however, continue to show less openness to the issue of biodiversity than other institutions involved in education for sustainable development (i.e. environmental centres or zoological gardens) (Wendler et al. 2010). "In view of the considerable pertinence of the topic for demonstrating global interplay and the need for an interdisciplinary approach, an increased involvement here [...] on the part of development policy providers is desirable" (Wendler et al. 2010: 9).

## **Conclusion**

The natural diversity of plant and animal species makes an essential contribution via intact ecosystem services to our socioeconomic well-being. The significance of biodiversity and the global dependencies and interplay is that they serve as a good model, making biodiversity an idea topic for global learning.

To date, however, this fact has not received sufficient attention. Were questions of biodiversity to be better integrated as an issue addressed by global learning, this could make a significant contribution to rendering the individual global dependencies between a loss of biological diversity and its socioeconomic effects clear and understandable. Exploring the significance of biodiversity for the well-being of humankind also promotes the development of skills relevant to sustainability, thus enabling learners to take action independently and contribute to conserving biodiversity and as such to the basis for their own subsistence. In light of this, it would clearly be advantageous to have more global learning projects explore the topic of "biodiversity".

## **Bibliography**

**Asbrand, B./Scheunpflug, A. (2005):** Globales Lernen. In: Sander, W. (Hg.): Handbuch Politische Bildung. Schwalbach/Ts.: 469-484.

**de Haan, G./Kamp, G./Lerch, A./Martignon, L./Müller-Christ, G./Nutzinger, H.G. (Hg.) (2008):** Nachhaltigkeit und Gerechtigkeit. Grundlagen und schulpraktische Konsequenzen. Berlin, Heidelberg.

**Lang-Wojtasik, G./Scheunpflug, A. (2005):** Kompetenzen Globalen Lernens. In: ZEP – Zeitschrift für internationale Bildungsforschung und Entwicklungspädagogik, 28, Heft 2: 2-7.

**Lucker, T./ Kölsch, O. (Hg.) (2009):** Naturschutz und Bildung für nachhaltige Entwicklung. Fokus: Globales Lernen. Bonn, Bad Godesberg.

**Menzel, S. (2010):** Biologische Ressourcen als Lebensgrundlage für alle – Biodiversität als Kontext des Globalen Lernens im Biologieunterricht. In: ZEP – Zeitschrift für internationale Bildungsforschung und Entwicklungspädagogik, Jg. 33, Heft 2: 10-15.

**Menzel, S./Bögeholz, S. (2009):** Biodiversität und Globales Lernen – Ein neuer Forschungsbereich. In: Lucker, T./ Kölsch, O. (Hg.): Naturschutz und Bildung für nachhaltige Entwicklung. Fokus: Globales Lernen. Bonn, Bad Godesberg: 127-147.

**Scheunpflug, A. (2001):** Die globale Perspektive einer Bildung für nachhaltige Entwicklung. In: Herz, O./Seybold, H./Strobl, G. (Hg.): Bildung für nachhaltige Entwicklung. Globale Perspektiven und neue Kommunikationsmedien. Opladen: 87-99.

**Seitz, K. (2002):** Bildung in der Weltgesellschaft. Gesellschaftstheoretische Grundlagen Globalen Lernens. Frankfurt/Main.

**Wendler, M./Rode, H./Michelsen, G. (2010):** Globales Lernen und Biodiversität in der außerschulischen Bildung in Deutschland. Ausgewählte Ergebnisse einer empirischen Studie. In: ZEP – Zeitschrift für internationale Bildungsforschung und Entwicklungspädagogik, Jg. 33, Heft 2: 4-9.

**WRI – World Resources Institute (2005):** Millennium Ecosystem Assessment: Ecosystems and Human Wellbeing. Synthesis. Washington D.C. Unter:  
<http://www.millenniumassessment.org/documents/document.356.aspx.pdf> (Stand: August 2010).

**ZEP – Zeitschrift für internationale Bildungsforschung und Entwicklungspädagogik (2010):** Biodiversität und Globales Lernen. ZEP, Jg. 33, Heft 2.